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APPLICATION	NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,968		07/10/2001	William G. Sample	H0001393	9229
128	7590	08/25/2004		EXAMINER	
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MORRIS	STOWN,	, NJ 07962-2245		2686	4
				DATE MAILED: 08/25/2004	4 0

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	
0.65	09/902,968	SAMPLE , ,	
Office Action Summary	Examiner	Art Unit	[1]
	Joy K Contee	2686	• 0
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with	h the correspondence add	dress
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perio - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mai earned patent term adjustment. See 37 CFR 1.704(b).	<ol> <li>I. 1.136(a). In no event, however, may a re- eply within the statutory minimum of thirty od will apply and will expire SIX (6) MONT ute, cause the application to become ABA</li> </ol>	ply be timely filed  (30) days will be considered timely.  THS from the mailing date of this cor  ANDONED (35 U.S.C. § 133).	mmunication.
Status			
1) ☐ Responsive to communication(s) filed on <u>04</u> 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ The solution of the condition of	nis action is non-final. vance except for formal matte		merits is
Disposition of Claims			
4)  Claim(s) 1-37 is/are pending in the application 4a) Of the above claim(s) is/are withdreds 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-37 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and Application Papers  9)  The specification is objected to by the Examination of the specification of the spec	rawn from consideration.  I/or election requirement.  ner.  ccepted or b) □ objected to be  ne drawing(s) be held in abeyand	ce. See 37 CFR 1.85(a).	R 1.121(d).
11) The oath or declaration is objected to by the	Examiner. Note the attached	Office Action or form PT	O-152.
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a list	ents have been received.  ents have been received in Apriority documents have been reau (PCT Rule 17.2(a)).	oplication No received in this National S	Stage
Attachment(s)	ОП. 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	(DTO 440)	
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date</li> </ol>	Paper No(s)	ummary (PTO-413) /Mail Date formal Patent Application (PTO- 	-152)

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#### **DETAILED ACTION**

### Response to Arguments

1. Applicant's arguments filed June 4, 2004 were fully considered but they are not persuasive.

To summarize, applicant argues that Briffe et al. does not disclose "receiving a first signal of an input radio frequency" nor "a second signal indicative of position" for retrieving a "portion" of radio frequency information as a function of the said first or second signal. First, Examiner interprets "as a function of the first or second signal" to read on the portion of radio frequency information is accessed using either the first or second signal or combination there of (see claims 10,16,22,26 and 32). Briffe et al., teaches that the use of NAVSTAR and GLONASS GPS and IRS platforms as principal navigation sensors provide aircraft position from radio signals transmitted (i.e., reads on position signal). Briffe et al. discloses that other supplemental navigational aids are also used (COL. 6,LINES 11-65). Briffe also teaches that ILS frequency and course can be manually tuned (COL. 8,LINES 60-64). Briffe et al. teaches that MFD is a workstation and has the capability to let users (e.g., pilots) modify selected parameters using the keyboard (i.e., entering new values). The MFD is used for managing a flight, which includes carrying out flight path modification, which inherently involves at least two signals, including input radio frequency and position signal (COL. 9,LINES 45-65 AND COL. 11, LINES 54-64). The functions Art Unit: 2686

of the MFD basically boil down to displaying desired portions of at least two data bases stored in he MAU. One of the databases is an aeronautical information database, which includes location information and frequencies for each navigational aid (col. 10,lines 44-65). As an example, flight planning is described in cols 31-32, wherein, inter alia, the flight plan is computed using the aeronautical information database, which includes the presently claimed "input radio frequency" in order to access the database.

Hence, after careful reconsideration the Examiner has modified the last office action to more clearly indicate the anticipation and to include a new grounds of rejection using Ward, US. Patent No. 6,282,417, for the new claims 36 and 37.

## Allowable Subject Matter

2. After careful reconsideration, the indicated allowable subject matter of claim 31 is withdrawn in view of the Briffe et al., previously used. Rejections based on the newly cited reference(s) follow.

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

<sup>(</sup>b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 36 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Ward, U.S. Patent No. 6,282,417.

Regarding claims 36 and 37, Ward discloses a method of providing information to a user, the method comprising:

manually tuning a radio to a desired frequency; receiving position information; accessing a database having information corresponding to multiple frequencies, wherein a subset of such information associated with manually tuned frequency (and in conjunction with the manually tuned frequency) at the received position is retrieved as function of the manually tuned frequency and position information (col. 7,lines 17-27 and col. 9,line 59 through col. 10, line 23 and col. 13, lines 12-22 and see Figs. 2-4).

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 6. Claims 1-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Briffe et al. (Briffe), U.S. Patent No. 6,038,498.

Regarding claim 1, Briffe discloses a device, comprising: a database of radio frequency information (i.e., reads on instrument landing system- ILS or microwave landing system- MLS frequency information) stored as a function of radio frequency (col. 5,lines 34-41 and col. 10,lines 57-62); and a circuit (i.e., reads on module in

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modular avionics units-MAU containing a processor functioning as a flight management system computer) coupled to the database and operating one or more algorithms (i.e., approaches and inherently software programs) for accessing the database as a function of an input radio frequency signal and generating a display signal as a function of an input radio frequency signal (col. 6,line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 10,lines 44-64 and col. 11, lines 25-27).

Regarding claim 2, Briff discloses the device of claim 1 wherein: the circuit is further structured to receive a position signal (i.e., reads on differential GPS-DGPS or GPS) (col. 6,lines 16-21 and lines 45-64; and the one or more algorithms include one or more algorithms for accessing the database as a function of both the input radio frequency signal (i.e., reads on ILS or MLS) and a position signal (GPS or DGPS) and generating a display signal as a function of an input radio frequency signal and a position signal (col. 6,line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 10,lines 44-64 and col. 11, lines 25-27)

Regarding claim 3, Briffe discloses the device of claim 2, further comprising a display coupled to the circuit, the display structured to receive the display signal and display the radio frequency information (col. 6,line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27).

Regarding claim 4, Briffe discloses the device of claim 2 wherein the circuit (i.e., MAU) is a processor (col. 5,lines 25-33).

Regarding claim 5, Briffe discloses an aircraft frequency identifier device, comprising: a database of stored radio frequency information (col. 5,lines 34-41 and col.

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10,lines 57-62); and a processor (i.e., reads on module in modular avionics units-MAU containing a processor functioning as a flight management system computer) coupled to the database and operating one or more algorithms (i.e., "approaches" and inherently software programs) for accessing the database as a function of an input radio frequency signal and generating a display signal as a function of an input radio frequency signal (col. 6,line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 10,lines 44-64 and col. 11, lines 25-27)

Regarding claim 6, Briffe discloses the device of claim 5 wherein the one or more algorithms (i.e., reads on approaches using navigation aids GPS, ILS or MLS for example) operated by the processor (MAU) access the database as a function of an input radio frequency (i.e., radio frequency is either manually entered or automatically entered) signal and a position signal (i.e., input automatically by GPS signals) (col. 9, lines 15-20 and col. 10, lines 57-62).

Regarding claim 7, Briffe discloses the device of claim 6 wherein the one or more algorithms operated by the processor retrieve from the database {a portion of} the radio frequency information corresponding to an input radio frequency signal and inherently a position signal (col. 9,lines 15-20).

Regarding claim 8, Briffe discloses the device of claim 7, further comprising a display coupled to the processor for receiving the display signal and generating a display as a function thereof (col. 11, lines 25-27).

Regarding claim 9, Briffe discloses the device of claim 8, further comprising a control device structured to input a radio frequency to one of the processor and the

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display (col. 6,line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 10,lines 44-64 and col. 11, lines 25-27).

Regarding claim 10, , Briffe discloses a device, comprising:

a database of radio frequency information stored as a function of radio frequency and position (col. 10,lines 27-62); and

a processor (MAU) having a first input structured to receive a signal indicative of an input radio frequency (i.e., ILS or MLS information) and a second input structured to receive a signal indicative of position (i.e., GPS or DGPS information), the processor coupled to the database and operating one or more algorithms for retrieving {a portion of } the radio frequency information as a function of a signal indicative of an input radio frequency received on the first input and a signal indicative of position received on the second input (col. 6, line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 10, lines 44-64 and col. 11, lines 25-27).

Regarding claim 11, Briffe discloses the device of claim 10 wherein the processor further operates one or more algorithms for generating a display signal indicative of {the portion of} the retrieved radio frequency information (col. 6, line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27).

Regarding claim 12, Briffe discloses the device of claim 11, further comprising a display coupled to receive the display signal (col. 6, line 63 to col. 7,line 4).

Regarding claim 13, Briffe discloses the device of claim 11, further comprising a control device (i.e., keyboard or other user control) coupled to the first input of the processor and structured to input a radio frequency to the processor (i.e., inherently the

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flight deck's MAU is coupled to the pedestal) (col. 4,line 48 to col. 5,line 4 and col. 6, line 66 to col. 7,line 4).

Regarding claim 14, Briffe discloses the device of claim 11, further comprising a control device coupled to the first input of the processor and structured to input a radio frequency to the display (col. 4, line 48 to col. 5, line 4 and col. 6, line 66 to col. 7, line 4).

Regarding claim 15, Briffe discloses the device of claim 11 wherein the second input (i.e., GPS navigational sensor in instrument panel) of the processor is structured to receive an output signal of a global positioning system that is indicative of position (col. 6,lines 45-64).

Regarding claim 16, Briffe discloses an aircraft frequency identifier, comprising: a means for inherently storing radio frequency information (i.e., since transceivers can be tuned by "pointing and clicking" on frequency in a digital map, frequency information must be stored) (col. 6,line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27);

an accessing means (i.e., user control device, e.g., keyboard or tracking ball), coupled to the storing means, for accessing the stored radio frequency information as a function of an input radio frequency signal and a position signal (col. 4,line 48 to col. 4,line 4 and col. 6,line 65 to col. 7,line 4 and col. 10,lines 44-64); and

an output signal generating means (i.e., data stored is displayed), coupled to the accessing means, for generating an output signal as a function of the accessed radio frequency information (col. 9,lines 12-27 and col. 11, lines 25-27).

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Regarding claim 17, Briffe discloses the device of claim 16 wherein the means for storing radio frequency information includes means for storing the radio frequency information in a look-up table (i.e., reads on data base) (col. 10,lines 44-63).

Regarding claim 18, Briffe discloses the device of claim 17 wherein the accessing means includes a means for operating one or more algorithms (i.e., reads on ILS approach) for retrieving the radio frequency information from a look-up table (database) (col. 9,line 15-20 and col. 10, line 57-63).

Regarding claim 19, Briffe discloses the device of claim 16, further including receiving means (i.e. reads on processor MAU), coupled to the output signal generating means, for receiving the output signal (col. 6,line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27).

Regarding claim 20, Briffe discloses the device of claim 19, further including displaying means, coupled to the output signal receiving means, for displaying the accessed radio frequency information (col. 6,line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27).

Regarding claim 21, Briffe discloses the device of claim 16, further including signal inputting means, coupled to the output signal accessing means, for inputting a radio frequency signal (col.9,lines 12-20).

Regarding claim 22, Briffe discloses a device, comprising:

database means for (i.e., since transceivers can be tuned by "pointing and clicking" on frequency in a digital map, frequency information must be stored) storing

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radio frequency information as a function of radio frequency and inherently a position (col. 9,lines 12-20);

and processor means for receiving a first signal indicative of an input radio frequency and a second signal indicative of position, the processor means coupled to the database means for retrieving {a portion of} the radio frequency information as a function of a first signal indicative of an input radio frequency and a second signal indicative of position (col. 4,line 48 to col. 4,line 4 and col. 6,line 65 to col. 7,line 4 and col. 8,lines 53-65 and col. 9,lines 12-20 and col. 10,lines 44-64).

Regarding claim 23, Briffe discloses the device of claim 22 wherein the processor means for retrieving {a portion of} the radio frequency information further includes processor means for operating one or more algorithms for retrieving a portion of the radio frequency information (col. 6,line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27).

Regarding claim 24, Briffe discloses the device of claim 23 wherein the processor means further includes signal generating means for generating a signal indicative of { the portion of} the radio frequency information retrieved by the processor means (col. 7, lines 1-4 and col. 11, lines 24-27).

Regarding claim 25, Briffe discloses the device of claim 24, further comprising display means, coupled to the processor means, for receiving the signal indicative of {the portion of} the radio frequency information and displaying the {portion of} the radio frequency information (col. 6,line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27).

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Regarding claim 26, Briffe discloses a method of identifying an aircraft frequency, comprising:

storing radio frequency information; accessing the stored radio frequency information as a function of an input radio frequency signal and a position signal and col. 10,lines 44-64); and

generating an output signal as a function of the accessed radio frequency information (col. 9,lines 12-20 and col. 11,lines 24-27).

Regarding claim 27, Briffe discloses the method of claim 26 wherein the storing radio frequency information includes storing the radio frequency information in a look-up table (i.e., reads on database) (col. 10,lines 57-63).

Regarding claim 28, Briffe discloses the method of claim 27 wherein the accessing the stored radio frequency information includes operating one or more algorithms (i.e., reads on approaches to navigational aids, e.g., GPS and ILS) for retrieving the radio frequency information from a look-up table (database) (col. 10,lines 57-63).

Regarding claim 29, Briffe discloses the method of claim 26, further including receiving the output signal the output signal and displaying the accessed radio frequency information (col. 11,lines 24-27).

Regarding claim 30, Briffe discloses the method of claim 26, further including inputting a radio frequency signal for use in the accessing the stored radio frequency information (col. 7,lines 1-4).

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Regarding claim 31, Briffe further discloses the method of claim 30, further including inputting a position signal for use in the accessing the stored radio frequency information (col. 6,lines 28-49).

Regarding claim 32, Briffe discloses a method of identifying an aircraft frequency, comprising:

storing radio frequency information in a database inherently as a function of radio frequency and position (col. 10,lines 57-60);

receiving in a processor a first signal indicative of an input radio frequency and a second signal indicative of position (col. 9,lines 15-20); and

retrieving from the database {a portion of} the radio frequency information inherently as a function of a first signal indicative of an input radio frequency and a second signal indicative of position (col. 9,lines 15-20 and col. 10,lines 44-64).

Regarding claim 33, Briffe discloses the method of claim 32 wherein the retrieving of {a portion of} the radio frequency information further includes operating one or more algorithms for retrieving {a portion} of the radio frequency information (col. 9,lines 15-20).

Regarding claim 34, Briffe discloses the method of claim 33, further including generating a signal (i.e., displaying) indicative of {the portion of} the retrieved portion of the radio frequency information (col. 9,lines 13-20).

Regarding claim 35, Briffe discloses the method of claim 34, receiving the signal indicative of the retrieved {portion of} the radio frequency information and displaying the retrieved {portion of the} radio frequency information (col. 9,lines 13-20).

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### **Double Patenting**

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-3 of copending Application No. 09/902,963 ('963). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-9 of the instant application encompass the scope of claims 1-3 of '963.

'963 claims a storing radio frequency identifiers and radio frequency information and a processor coupled to a database (see claims 1 and 2). The instant application claims stored radio frequency information and a circuit coupled to database (see claims 1 and 5). Radio frequency identifiers are analogous to radio frequency information, i.e., any identifier of a radio frequency (e.g., named frequency identifier, ILS for instrument landing system) encompasses frequency information. Further, a processor and a circuit are analogous.

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Omission of element and its function in combination is obvious expedient if

remaining elements perform same functions as before. In re KARLSON (CCPA) 136

USPQ 184 (1963).

This is a provisional obviousness-type double patenting rejection because the

conflicting claims have not in fact been patented.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joy K Contee whose telephone number is 703-308-

0149. The examiner can normally be reached on 5:30 a.m. to 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Marsha Banks-Harold can be reached on 703-305-4379. The fax phone

number for the organization where this application or proceeding is assigned is 703-

872-9306.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-306-

0377.

August 23, 2004

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